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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,057	07/23/2001	Kenji Kusunoki	P107385-00005	2560

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EXAMINER

HUFFMAN, JULIAN D

ART UNIT PAPER NUMBER

2853

DATE MAILED: 04/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/910,057	Applicant(s) KUSUNOKI, KENJI	
	Examiner Julian D. Huffman	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 and 6 is/are allowed.
- 6) ☒ Claim(s) 3 and 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 26 January 2004 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 and 4 recite the limitations:

"the other of the first pair of helical gears" in line 2 of paragraph (g); and

"the other of the pair of images" in line 8 of paragraph (g) There is insufficient antecedent basis for these limitations in the claims; the limitations are unclear and the claims are indefinite.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. in view of Schneider et al.

Ueda et al. disclose a web-fed, multicolor, offset printing press having a series of printing units for printing different color images on a continuous web of paper or like material traveling along a predefined path at a predetermined speed, each printing unit being a combination of a blanket cylinder assembly and a plate cylinder assembly, each printing unit comprising:

a plate cylinder (fig. 10, element PC) split into a pair of halves for printing a pair of images in juxtaposition transversely of the web, the pair of halves of the plate cylinder being capable of independent displacement both axially and circumferentially of the plate cylinder for registration of the pair of images printed on the web with the other pairs of images printed by the other printing units (abstract);

a blanket cylinder (BC) in rolling contact with the plate cylinder;

a first pair of helical gears coaxially coupled to the pair of halves of the plate cylinder at opposite ends of the plate cylinder for joint rotation therewith respectively (fig. 9, element 116, fig. 8, element 121);

a second pair of helical gears coaxially coupled to opposite ends of the blanket cylinder for joint rotation therewith, the second pair of helical gears being each in mesh with one of the first pair of helical gears for joint rotation of the plate cylinder and the blanket cylinder in opposite directions (115, 120);

a pair of axial adjustment means each for causing axial displacement of each half of the plate cylinder independently of the other half with a view to fine positioning of each of the pair of images transversely of the web (figs. 8 and 9, element 101, column 12, lines 17-51);

circumferential adjustment means (fig. 9, element 117) coupled to one of the first pair of helical gears, for causing circumferential displacement of one of the halves of the plate cylinder relative to the other half by causing axial displacement of said one of the first pair of helical gears, which is in sliding engagement with one of the second pair of helical gears, with a view to fine positioning of one of the pair of images longitudinally of the web (column 12, line 52-column 13, line);

wherein the plate cylinder has a pair of trunnions (114) coaxially coupled on to each half thereof, and wherein the axial adjustment means comprises a pair of axial adjustments coupled one to each half of the plate cylinder of each printing unit, each axial adjustment comprising:

frame means (133);

an axial adjustment motor (131) mounted to the frame means, the axial adjustment motor being capable of bidirectional rotation;

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a sleeve (135) coaxially and rotatable mounted to one trunnion of the plate cylinder and constrained to axial displacement therewith and hence with one half of the plate cylinder relative to the frame means, the sleeve being driven for bidirectional rotation from the axial adjustment motor (column 12, lines 46-51); and

screw thread means acting between the frame means and the sleeve for causing the sleeve to travel axially back and forth with said one plate cylinder half upon bidirectional rotation of the sleeve (137, 138, column 12, lines 26-32);

wherein the circumferential adjustment means comprises:

a frame means (133);

a circumferential adjustment motor mounted to the frame means (142), the circumferential adjustment motor being capable of bidirectional rotation;

a first annular gear nonrotatably mounted to one trunnion of the plate cylinder (118);

a second annular gear concentrically surrounding the first annular gear and engaged therewith for joint rotation while being free to travel axially relative to the same, one of the first pair of helical gears being concentrically and nonrotatably mounted to the second annular gear (117);

a sleeve coaxially and rotatably mounted to the second annular gear and constrained to axial displacement therewith and hence with one of the first pair of helical gears, the sleeve being driven for bidirectional rotation from the circumferential adjustment motor (145); and

screw thread means (148) acting between the frame means and the sleeve for causing the sleeve to travel axially back and forth with the second annular gear, and hence with said one of the first pair of helical gears, upon bidirectional rotation of the sleeve, said one helical gear on axial displacement being displaced circumferentially with one half of the plate cylinder by virtue of its engagement with one of the second pair of helical gears on the opposite ends of the blanket cylinder (column 13, lines 1-20).

Ueda et al. do not disclose a drive cylinder motor for each printing unit.

Schneider et al. disclose a first drive means (M) connected to a first blanket cylinder (2) for driving a first pair of a blanket cylinder and plate cylinder (3) and second drive means connected to a second blanket cylinder for driving a second pair of a blanket cylinder and plate cylinder (fig. 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the driving structure of Schneider et al. into the invention of Ueda et al. The reason for performing the modification would have been to economically provide optimal print positions (column 2, lines 31-35) with a simple design with the highest possible degree of configuration freedom in forming print positions and groups of print positions (column 6, line 64-column 7, line 2).

Allowable Subject Matter

6. Claim 5 and 6 are allowed.

The prior art of record does not disclose a threaded rod extending through the first sleeve.

Response to Arguments

7. Applicant argues that Ueda et al. does not teach each printing unit being a combination of a blanket cylinder assembly and a plate cylinder assembly and each printing unit includes a cylinder drive motor drivingly coupled to either of first and second pairs of helical gears for jointly driving the plate cylinder and blanket cylinder in opposite directions. Ueda et al. teach each printing unit being a combination of a blanket cylinder assembly and a plate cylinder assembly (PCa, BC, BC', PCa') and each printing unit includes a cylinder drive motor (108) drivingly coupled to either of first and second pairs of helical gears for jointly driving the plate cylinder and the blanket cylinder. Two possible interpretations of the claims may be made. In the first interpretation, one cylinder motor drives both printing units and therefore each printing unit comprises a cylinder motor. In the second interpretation, each printing unit has its own separate cylinder motor. The examiner agrees that only one cylinder motor is disclosed in Ueda et al. and is interpreting the claims to recite a separate cylinder motor for each printing unit, as this is the interpretation applicant's arguments are directed towards. However, claims 3 and 4 are still unpatentable over Ueda et al. in view of Schneider et al.

Applicant's argument that Ueda et al. do not disclose a first pair of helical gears coaxially coupled to a pair of halves of the plate cylinder at opposite ends of the plate cylinder for joint rotation therewith respectively has been considered and is deemed not persuasive. Ueda et al. teach the first pair of helical gears as elements 116 and 121,

which are coupled to a pair of halves of the plate cylinder at opposite ends for joint rotation therewith respectively.

Applicant's argument that Ueda et al. do not disclose a cylinder drive motor drivingly coupled to the other of the first pair of helical gears has been considered and is deemed not persuasive. The phrase "the other of the first pair of helical gears" lacks antecedent basis and is not clear.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (703) 308-6556. The examiner can normally be reached on Monday through Friday from 9:30 a.m. to 6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow, can be reached at (703) 308-3126. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722. Faxes requiring the immediate attention of the examiner may be sent directly to the examiner at (703) 746-4386. Note that this number will not automatically send a confirmation that the fax was received.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


JH

April 6, 2004


Thinh Nguyen
Primary Examiner
Technology Center 2800